## Exhibit 8

Page 1

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

IN RE: NATIONAL )

PRESCRIPTION ) MDL No. 2804

OPIATE LITIGATION )

Case No. 1:17-MD-2804
)

THIS DOCUMENT RELATES ) Hon. Dan A.

TO ALL CASES ) Polster

WEDNESDAY, APRIL 24, 2019

HIGHLY CONFIDENTIAL - SUBJECT TO FURTHER CONFIDENTIALITY REVIEW

- - -

Videotaped deposition of Anna
Lembke, M.D., held at the offices of Lieff
Cabraser Heimann & Bernstein, LLP, 275
Battery Street, 29th floor, San Francisco,
California, commencing at 8:07 a.m., on the
above date, before Carrie A. Campbell,
Registered Diplomate Reporter and Certified
Realtime Reporter.

- - -

GOLKOW LITIGATION SERVICES 877.370.3377 ph | 917.591.5672 fax deps@golkow.com

	Page 14		Page 16
1	would hold yourself out as a psychiatrist as	1	peer-reviewed research studies or articles
2	opposed to a pain management physician or an	2	you've authored in the field of
3	anesthesiologist?	3	anesthesiology, pain medicine or hospice and
4	MR. ARBITBLIT: Object to form.	4	palliative medicine?
5	THE WITNESS: I would disagree	5	A. I've authored two peer-reviewed
6	with that statement because I do hold	6	articles in pain medicine journals, but I
7	myself out as having expertise in the	7	have written more broadly on the issue of
8	field of pain management, but not	8	pain vis-à-vis the opioid epidemic, and so
9	anesthesiology, per se.	9	that more broad area would include more of my
10	QUESTIONS BY MR. TSAI:	10	publications.
11	Q. How many hours have you spent	11	Q. And focusing on the two
12	treating patients in palliative care, for	12	articles in Pain Medicine journals, what were
13	example, for their individual pain needs?	13	the subject matters of those two articles?
14	A. I have not worked in a	14	A. The subject matter of those two
15	palliative care setting.	15	articles in Pain Medicine journals had to do
16	Q. How many patients have you	16	with perioperative management of opioid
	diagnosed with chronic pain as another	17	agonist treatments such as buprenorphine and
17	example?	18	methadone.
18	1	19	
19	A. I have diagnosed many patients	20	Q. Who retained you as a
20	with chronic pain over the years. I've been	20	testifying witness in this case?  A. Lieff Cabraser Heimann &
21	in practice for more than 20 years, seen		
22	approximately 40,000 patients over my career.	22	Bernstein.
23	I couldn't tell the exact number that I've	23	Q. And do you know who they
24	diagnosed with chronic pain, but if I had to	24	represent?
25	put a ballpark estimate, I would say	25	A. They represent the MDL.
	Page 15		_ 10
			Page 17
1	something on the order of 50 percent of my	1	Q. Can you be more specific?
1 2	something on the order of 50 percent of my patients have some kind of chronic pain	2	
	something on the order of 50 percent of my patients have some kind of chronic pain diagnosis.	2 3	<ul><li>Q. Can you be more specific?</li><li>A. They represent the plaintiffs in this case.</li></ul>
2	something on the order of 50 percent of my patients have some kind of chronic pain diagnosis.  Q. What is the total number of	2 3 4	<ul><li>Q. Can you be more specific?</li><li>A. They represent the plaintiffs in this case.</li><li>Q. And who are the plaintiffs in</li></ul>
2	something on the order of 50 percent of my patients have some kind of chronic pain diagnosis.	2 3 4 5	<ul><li>Q. Can you be more specific?</li><li>A. They represent the plaintiffs in this case.</li><li>Q. And who are the plaintiffs in this case?</li></ul>
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2 3 4 5	something on the order of 50 percent of my patients have some kind of chronic pain diagnosis.  Q. What is the total number of patients you've treated for their individual pain needs as opposed to addiction associated with surgeries or cancer?	2 3 4 5	<ul> <li>Q. Can you be more specific?</li> <li>A. They represent the plaintiffs in this case.</li> <li>Q. And who are the plaintiffs in this case?</li> <li>A. The plaintiffs are the counties and other entities who have been harmed as a</li> </ul>
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	something on the order of 50 percent of my patients have some kind of chronic pain diagnosis.  Q. What is the total number of patients you've treated for their individual pain needs as opposed to addiction associated with surgeries or cancer?  MR. ARBITBLIT: Object to form.  THE WITNESS: It's difficulty for me to put an exact number on that.  The majority of patients that I treat for their pain needs also have some sort of co-occurring mental health disorder, but pain is a priority in the overall treatment plan of those patients.  QUESTIONS BY MR. TSAI:  Q. So just to be clear, in your practice, you engage in primary diagnoses of patients who are complaining of pain and deciding how to treat their pain needs?  MR. ARBITBLIT: Objection.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Can you be more specific? A. They represent the plaintiffs in this case. Q. And who are the plaintiffs in this case? A. The plaintiffs are the counties and other entities who have been harmed as a result of the opioid epidemic. Q. Which counties? A. There are too many counties to I guess the bellwether counties would be Cuyahoga and Summit Counties in Ohio. Q. Have you ever prescribed opioid medications? A. Yes. Q. Since when? A. I prescribe opioid medications on a weekly basis. Q. So when did you start prescribing opioid medications? A. Since I obtained a DEA license. Q. And when was that?

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	Page 18		Page 20
1	medications to?	1	Q. Okay. Other than the Medicare
2	A. It's difficult for me to put a	2	database, did you conduct any of your own
3	number on that. I've been prescribing opioid	3	epidemiological analysis of any data in this
4	medications since I became a practicing	4	case specific to the strike that.
5	physician, and in recent years, I prescribed	5	Other than the Medicare
6	more opioid medication in the treatment of	6	database, did you conduct any original
7	opioid use disorder.	7	epidemiological analysis of any data in this
8	Q. Other than opioid use disorder,	8	case?
9	have you prescribed opioid medications for	9	A. Yes, I did.
10	any other condition or indication?	10	Q. What data?
11	A. Yes, I have. In the general	11	A. Qualitative data that I
12	practice of medicine through my career, I	12	collected in preparation for writing my book,
13	have prescribed other opioid medications.	13	"Drug Dealer, MD: How Doctors Were Duped,
14	Q. What conditions or indications?	14	Patients Got Hooked, and Why It's So Hard to
15	A. Typically pain conditions.	15	Stop."
16	Q. When you prescribe opioid	16	Q. And what do you mean by
17	medications to your patients, do you weigh	17	qualitative data in connection with writing
18	the risks and benefits based on your	18	your book?
19	individual patients' medical histories and	19	A. Interviews that I conducted
20	conditions?	20	with patients and health care providers in an
21	A. Yes, of course.	21	attempt to understand the progression of the
22	Q. Do you have any degrees in	22	opioid epidemic in our population.
23	epidemiology?	23	Q. Okay. And other than
24	A. No.	24	conducting interviews in connection with
25	Q. Can you explain to the jury	25	writing your book, did you conduct any
	7 1 37	-	
	Page 19		Page 21
1		1	
1 2	what epidemiology means?	1 2	quantitative analysis in connection with
2	what epidemiology means?  A. Epidemiology is the study of	2	quantitative analysis in connection with that?
2 3	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a	2	quantitative analysis in connection with that?  A. No.
2 3 4	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a population.	2 3 4	quantitative analysis in connection with that?  A. No. Q. If you were asked to design an
2 3 4 5	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a population.  Q. Did you yourself actually	2 3 4 5	quantitative analysis in connection with that?  A. No. Q. If you were asked to design an epidemiological study and statistically
2 3 4 5 6	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a population.  Q. Did you yourself actually conduct any of the epidemiological research	2 3 4 5 6	quantitative analysis in connection with that?  A. No. Q. If you were asked to design an epidemiological study and statistically analyze the data results for submission to a
2 3 4 5 6 7	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a population.  Q. Did you yourself actually conduct any of the epidemiological research cited in your report regarding factors	2 3 4 5 6 7	quantitative analysis in connection with that?  A. No. Q. If you were asked to design an epidemiological study and statistically analyze the data results for submission to a peer-reviewed journal, would you ask for
2 3 4 5 6 7 8	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a population.  Q. Did you yourself actually conduct any of the epidemiological research cited in your report regarding factors associated with the opioid crisis?	2 3 4 5 6	quantitative analysis in connection with that?  A. No. Q. If you were asked to design an epidemiological study and statistically analyze the data results for submission to a peer-reviewed journal, would you ask for help, or would you do that all by yourself?
2 3 4 5 6 7 8	what epidemiology means?  A. Epidemiology is the study of the progression of disease through a population.  Q. Did you yourself actually conduct any of the epidemiological research cited in your report regarding factors associated with the opioid crisis?  A. Yes, I did.	2 3 4 5 6 7 8	quantitative analysis in connection with that?  A. No. Q. If you were asked to design an epidemiological study and statistically analyze the data results for submission to a peer-reviewed journal, would you ask for help, or would you do that all by yourself?  MR. ARBITBLIT: Objection.
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	Page 26		Page 28
1	working on the submission of any ANDA to the	1	Counties, and so I can speak to the
2	FDA?	2	issue of the opioid epidemic in those
3	A. No.	3	counties.
4	Q. What is an NDA?	4	QUESTIONS BY MR. TSAI:
5	A. I don't know.	5	Q. Is the CDC data that you are
6	Q. What is an ANDA?	6	referring to specific to any particular
7	A. I don't know.	7	individuals residing in those counties that
8	Q. Have you ever worked on the	8	allows you to identify their medical
9	submission do you have any experience	9	condition or the circumstances of their
10	working on the submission of any prescription	10	opioid use?
11	medication marketing materials to the FDA for	11	MR. ARBITBLIT: Object to form.
12	government approval?	12	THE WITNESS: The CDC data is
13	A. I served on the research	13	looking at individuals in aggregate,
14	advisory panel of California where we	14	not any one individual that I could
15	reviewed studies that were being conducted in	15	identify.
16	the state of California on using various	16	QUESTIONS BY MR. TSAI:
17	investigative pharmaceuticals and my role was	17	Q. Have you ever asked for or been
18	to assess the safety of those studies. And	18	provided any information specific to Cuyahoga
19	so in that sense I have reviewed numerous	19	or Summit Counties regarding individual
20	studies in the process of companies seeking	20	persons whose addiction the counties contend
21	FDA approval for their drug.	21	led to costs in this case?
22	Q. And what was the connection in	22	MR. ARBITBLIT: I'll instruct
23	that panel to any company's marketing	23	you not to answer as to that question
24	material?	24	because it involves the
25	A. Well, it wasn't marketing	25	attorney-expert privilege.
	Page 27		Page 29
1	material, per se.	1	Don't answer.
2	Q. Do you have any experience	2	QUESTIONS BY MR. TSAI:
3	regarding FDA regulations that govern	3	Q. Let me rephrase it.
4	pharmaceutical marketing?	4	Have you ever reviewed any
5	A. No.	5	information specific to Cuyahoga or Summit
6	Q. Have you ever treated any	6	Counties regarding any actual individuals
7	person in Cuyahoga or Summit Counties for	7	whose opioid addiction the counties contend
8	opioid addiction?	8	led to the costs that they're seeking in this
9	A. No.	9	case?
10	Q. Have you ever treated any	10	A. Well, I have reviewed
11	patients in Cuyahoga or Summit Counties for	11	information specific to Cuyahoga and Summit
12	any medical condition related to opioids?	12	Counties regarding individuals living in
13	A. No.	13	those counties broadly speaking as an
14	Q. Have you ever been to Summit	14	aggregate, not any one individual. I haven't
15	County?	15	personally treated any one individual living
16	A. No, but I have been to Cuyahoga	16	in those counties.
17	County.	17	Q. Well, let me ask it this way:
18	Q. Are you able to identify any	18	Do you have any basis to tell us whether for
19	particular individuals whose opioid addiction	19	any individual in Cuyahoga and Summit
20	or overdose led to costs incurred by Cuyahoga	20	Counties whose opioid addiction or overdose
21	or Summit Counties?	21	allegedly led the counties to incur expenses,
22	MR. ARBITBLIT: Object to form.	22	the clinical context of their opioid use?
23	THE WITNESS: I am able to I	23	MR. ARBITBLIT: Object to form.
24	have analyzed the CDC data from Ohio,	24	THE WITNESS: Yes, I believe
25	including Summit and Cuyahoga	25	that I do.

	Page 46		Page 48
1	trying to capture the very real	1	what are you referring to?
2	phenomenon of flooding in our society	2	A. Well, I have a courtesy
3	of opioid medication as a result of	3	appointment at Stanford University School of
4	misleading messaging by the defendants	4	Medicine in the department of pain. Those
5	that led to the use of those opioids	5	courtesy appointments are given out in
6	in minor and chronic pain conditions	6	recognition of my expertise in the treatment
7	and then made them readily accessible,	7	of pain. I see patients within the Stanford
8	not just to people who were prescribed	8	University School of Medicine Pain Clinic.
9	opioids, but even those not being	9	In that context, I regularly collaborate with
10	prescribed opioids.	10	my pain colleagues around complex patients.
11	QUESTIONS BY MR. TSAI:	11	We have interdisciplinary team treatment
12	Q. And to be clear about the scope	12	meetings where we will discuss those patients
13	of this phenomenon, as you call it, does the	13	in collaboration to try to come together to
14	Tsunami Effect include within its scope	14	find the best treatment plan.
15	individuals who deliberately committed a	15	I also frequently communicate
16	crime in obtaining and using opioids?	16	with my pain colleagues using the electronic
17	MR. ARBITBLIT: Object to form.	17	medical records system and by telephone as we
18	THE WITNESS: Yes.	18	collaborate together to come up with the best
19	QUESTIONS BY MR. TSAI:	19	treatment plan for our patients with pain.
20	Q. And just in going back to our	20	Q. Are there any particular
21	discussion about your practice of prescribing	21	branded opioid medications that you can
22	opioid medications to your patients, can you	22	recall prescribing?
23	name the opioid medications that you have	23	A. No.
24	prescribed over the course of your career?	24	Q. Do you recall prescribing
25	A. I have prescribed opioids,	25	hydromorphone?
	Page 47		Page 49
	1490 17		
1	Sahadula II aniaida ayar tha agursa of my	1	
1	Schedule II opioids, over the course of my	1	A. I think I already answered that
2	career, probably every one that you could	2	A. I think I already answered that question.
2 3	career, probably every one that you could imagine in the course of inpatient treatment.	2 3	A. I think I already answered that question. Q. What was your answer? I don't
2 3 4	career, probably every one that you could imagine in the course of inpatient treatment.  And I can't specifically name	2 3 4	A. I think I already answered that question. Q. What was your answer? I don't recall.
2 3 4 5	career, probably every one that you could imagine in the course of inpatient treatment.  And I can't specifically name them because I can't recollect the specific	2 3 4 5	A. I think I already answered that question. Q. What was your answer? I don't recall. A. I don't recall any specific
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2 3 4 5 6 7	career, probably every one that you could imagine in the course of inpatient treatment.  And I can't specifically name them because I can't recollect the specific instances.  In recent years, especially	2 3 4 5 6 7	A. I think I already answered that question. Q. What was your answer? I don't recall. A. I don't recall any specific pain medications that I prescribed outside of the buprenorphine-naloxone that I now
2 3 4 5 6 7 8	career, probably every one that you could imagine in the course of inpatient treatment.  And I can't specifically name them because I can't recollect the specific instances.  In recent years, especially practicing as an outpatient provider, I	2 3 4 5 6 7 8	A. I think I already answered that question. Q. What was your answer? I don't recall. A. I don't recall any specific pain medications that I prescribed outside of the buprenorphine-naloxone that I now prescribe regularly in my outpatient
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	Page 50		Page 52
1	pharmaceutical company or consulted for one?	1	
1 2	A. No.	1 2	phenomenon that you call the Tsunami Effect?  MR. ARBITBLIT: Object to form.
3	Q. Do you have any experience or	3	THE WITNESS: I guess I would
4	expertise regarding the setting of DEA quotas	4	want to know what multiple steps
5	for prescription opioid medications?	5	you're referring to.
6	A. I'm aware of DEA quotas. I'm	6	QUESTIONS BY MR. TSAI:
7	aware of the discussion around them vis-à-vis	7	Q. Well, as you envisioned the
8	the opioid epidemic.	8	Tsunami Effect, do you agree that for any of
9	Q. Do you agree that the	9	the prescription opioid medications that you
10	defendants in this case are part of the legal	10	refer to in your report first, it has to
11	prescription medicine manufacturing and	11	be submitted for FDA approval?
12	supply business?	12	A. Yes.
13	MR. ARBITBLIT: Object to form.	13	Q. And are you familiar with what
14	THE WITNESS: I guess I'm	14	requirements must be met in order for the
15	not I don't really understand the	15	government to approve a prescription opioid
16	question.	16	medication as safe and effective?
17	QUESTIONS BY MR. TSAI:	17	A. I am familiar, but I have not
18	Q. The defendants in this case are	18	been asked to opine on that aspect of the
19	making and selling legally approved,	19	case.
20	government-regulated medicines?	20	Q. And in addition to approval by
21	MR. ARBITBLIT: Is that a	21	the Food and Drug Administration as safe and
22	question or a statement?	22	effective, do you agree that opioid
23	QUESTIONS BY MR. TSAI:	23	medications must be approved by the DEA for
24	Q. Do you agree?	24	manufacturing and sale?
25	A. Is that a question or a	25	A. Yes.
	- F1		
	Page 51		Page 53
1	statement?	1	
1 2	statement?	1 2	Q. Okay. And then once an opioid
	statement? Q. I said, do you agree with that?		Q. Okay. And then once an opioid medication pill is made, what is your
2	statement? Q. I said, do you agree with that?	2	Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an
2 3	statement? Q. I said, do you agree with that? A. Could you rephrase the	2 3	Q. Okay. And then once an opioid medication pill is made, what is your
2 3 4	statement? Q. I said, do you agree with that? A. Could you rephrase the question?	2 3 4	Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an actual individual in Cuyahoga and Summit
2 3 4 5	statement? Q. I said, do you agree with that? A. Could you rephrase the question? Q. The defendants in the case are	2 3 4 5	Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an actual individual in Cuyahoga and Summit Counties for use?
2 3 4 5 6	statement? Q. I said, do you agree with that? A. Could you rephrase the question? Q. The defendants in the case are making and selling legally approved,	2 3 4 5 6	Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an actual individual in Cuyahoga and Summit Counties for use?  MR. ARBITBLIT: Object to form.
2 3 4 5 6 7	statement?  Q. I said, do you agree with that? A. Could you rephrase the question?  Q. The defendants in the case are making and selling legally approved, government-regulated medicines; is that	2 3 4 5 6 7	Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an actual individual in Cuyahoga and Summit Counties for use?  MR. ARBITBLIT: Object to form. THE WITNESS: Well, there's the
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. I said, do you agree with that? A. Could you rephrase the question? Q. The defendants in the case are making and selling legally approved, government-regulated medicines; is that correct? A. Well, I guess I would object to the form of the question, especially the government-regulated medicine part. I think that the defendants in this case have also had a major responsibility in that process of regulation. Q. Do you have any basis to say that defendants are selling medicines that are not legally approved? MR. ARBITBLIT: Object to form. THE WITNESS: Yes, the medicines are legally approved. QUESTIONS BY MR. TSAI: Q. Do you agree that there are	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an actual individual in Cuyahoga and Summit Counties for use?  MR. ARBITBLIT: Object to form.  THE WITNESS: Well, there's the production part, and then there's the distribution part where it's then transported to a pharmacy, and then the pharmacy is the dispensing agent for that pill.  QUESTIONS BY MR. TSAI:  Q. And before any individual in Cuyahoga and Summit Counties can obtain an opioid, they need to get a prescription from a doctor, correct?  MR. ARBITBLIT: Object to form.  THE WITNESS: Yes.  QUESTIONS BY MR. TSAI:  Q. Okay. So if we could discuss one of the articles that you cite in your

dentist, approximately 6 percent of them were later diagnosed with an 3 opioid use disorder within a year.  My point being that there is a 5 risk with exposure to medical use of opioids, not just to nonmedical use of opioids, not just to nonmedical use of opioids, not just to nonmedical use of opioids.  MR. ARBITBLIT: And Federal Rule 106, Rule of Completeness, 21 Counsel, page 378 of the article you're reading from states exactly this, "Medical use of prescription opioids during adolescence is associated with greater odds of misuse," citing Harbaugh 2018, McCabe, 2013, and '16, and Mlech, 2015.  MR. ATSA1: I object to 18 MR. ATSA1: I object to 19 counsel's testimony.  MR. ARBITBLIT: It's not 12 testimony, It's the Rule of Completeness, Counsel. You should be 23 familiar with it. 24 MR. TSA1: The 24 infectious diseases were caused by actions independent of opioid use that are associated or that cause infectious diseases kike HIV and hepatius C include risky sexual conduct, for example; do 20 And actions independent of opioid use that are associated or that cause infectious diseases like HIV and hepatius C include risky sexual conduct, for example; do 20 And actions independent of opioid use that are associated or that cause infectious diseases like HIV and hepatius C include risky sexual conduct, for example; do 20 And actions independent of opioid use that are associated or that cause infectious diseases were caused by actions independent opioid use that are associated or that cause infectious diseases were caused by actions independent opioid use that are associated or that cause infectious diseases were caused by actions independent opioid use that are associated or that cause infectious diseases were caused by actions independent opioid use that are associated or that cause infectious diseases were caused by actions independent opioid use that are associated or that cause infectious diseases were caused by actions independent opioid use that are associated or that cause infectious diseases were caused by		Page 62		Page 64
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MR. ARBITBLIT: And Federal   9   Rule 106, Rule of Completeness,   9   10   Counsel, page 378 of the article   10   you're reading from states exactly   11   you're reading from states exactly   12   this, "Medical use of prescription opioids during adolescence is   13   report, on page 89, you talk about   hepatitis C, HIV and other infectious   diseases.   Have you reviewed any data to   reliably rule out the likelihood that cases   of hepatitis C, HIV and other infectious   diseases were caused by actions independent   from opioid use?   A. No.   No.   Q. And actions independent   A. No.   A. No.   Q. And actions independent   from opioid use?   A. Yes.   A. Yes.   Q. So putting aside absolute risk, and we'll talk about risk later on, but what is your - this is a finding comparing   likelihood of addictive substance use   disorder in two groups, correct, adolescents who had medical use of prescription opioids, correct?   A. No.   Q. Do you have any - did you opioid addiction or opioid abuse?   A. No.   Q. Do you have any - did you conduct any analysis, or do you have any obasis to quantify what percentage of cases of hepatitis C, HIV or other infectious   diseases you refer to existed prior to any opioid addiction or opioid abuse?   A. No.   Q. Do you have any - did you conduct any analysis, or do you have any basis to quantify what percentage of cases of hepatitis C, HIV and other infectious   diseases you refer to existed prior to any opioid addiction or opioid abuse?   A. No.   Q. A. No.   Q. And just to be clear, opioid use?   A. No.   Q. And just to be clear, opioid use disorder and addiction are not contagious, infectious diseases, correct?   A. I would sort of disagree with that,   Q. State and patch problem.   A. No.   Q. Soputing aside absolute risk,   A. No.   Q. Soputing aside absolute risk,   A. No.   Q. A. A. N			7	
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14 associated with greater odds of 15 subsequent prescription opioid. 16 misuse, "citting Harbaugh 2018, McCabe, 17 2013, and '16, and Mlech, 2015. 18 MR. TSAI: Tobject to 19 counsel's testimony. 20 MR. ARBITBLIT: It's not 21 testimony. It's the Rule of 22 Completeness, Counsel. You should be 23 familiar with it. 24 MR. TSAI: The 25 Page 63  1 QUESTIONS BY MR. TSAI: 2 Q. So putting aside absolute risk, 3 and we'll talk about risk later on, but what 4 is your this is a finding comparing 5 likelihood of addictive substance use 6 disorder in two groups, correct, adolescents 7 who had medical use of prescription opioids, no history of nomedical use or abuse, and 9 adolescents who never took prescription 10 opioids, correct? 11 Am I reading that correct? 12 MR. ARBITBLIT: Object to form. 13 THE WITNESS: So to me, this 14 that statement that you just read is 15 good evidence for the Tsunami Effect. 16 That basically because there has been increased access to opioids, including for teenagers, that has subsequently 19 increased access to opioids, including 18 for teenagers, that has subsequently 19 increased access to opioids, including 19 increased access to opioids, including 19 increased fleir risk of going on to develop some kind of substance use 20 develop some kind of substance use 21 problem. 22 Q. And actions independent from opioid use? 23 A. No. 24 A. No. 25 You agree? 26 A. Yes. 27 A. Yes. 28 Q. Have you reviewed any data to reliably rule out the likelihood that cases of hepatitis C, HIV or other infectious diseases like HIV and opiciouse? 24 A. No. 25 Q. And actions independent from opioid use? 25 A. No. 26 Q. Have you reviewed any data to reliably rule out the likelihood that cases of hepatitis C, HIV or other infectious diseases were caused by reliably rule out the likelihood that cases of hepatitis C, HIV or other infectious diseases vor retain the access of pioid use ease of hepatitis C, HIV or other infectious diseases vor reliably rule out the likelihood that cases of hepatitis C, HIV or othe				
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23 QUESTIONS BY MR. TSAI: 23 an opioid use pathogen? 24 Q. What is your what is the 24 MR. ARBITBLIT: Let her finish	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	QUESTIONS BY MR. TSAI:  Q. So putting aside absolute risk, and we'll talk about risk later on, but what is your this is a finding comparing likelihood of addictive substance use disorder in two groups, correct, adolescents who had medical use of prescription opioids, no history of nonmedical use or abuse, and adolescents who never took prescription opioids, correct?  Am I reading that correct?  MR. ARBITBLIT: Object to form.  THE WITNESS: So to me, this that statement that you just read is good evidence for the Tsunami Effect.  That basically because there has been increased access to opioids, including for teenagers, that has subsequently increased their risk of going on to develop some kind of substance use	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	you agree?  A. Yes.  Q. Have you reviewed any data to reliably rule out the likelihood that cases of hepatitis C, HIV or other infectious diseases you refer to existed prior to any opioid addiction or opioid abuse?  A. No.  Q. Do you have any did you conduct any analysis, or do you have any basis to quantify what percentage of cases of hepatitis C, HIV and other infectious diseases that you refer to were caused by reasons that had nothing to do with opioid use?  A. No.  Q. And just to be clear, opioid use disorder and addiction are not contagious, infectious diseases, correct?  A. I would sort of disagree with
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	Page 66		Page 68
1	THE WITNESS: There is not a	1	Effect," capital D, capital E, and there you
2	pathogen, per se, but the way that	2	refer to individuals who become dependent on
3	opioid use disorder has spread through	3	opioids independent of addiction.
4	the population is quite similar in	4	That's how you defined
5	pattern to the way that infectious	5	Dependence Effect.
6	diseases spread through close	6	What is opioid dependence, in
7	contacts.	7	your words, independent of addiction? What
8	QUESTIONS BY MR. TSAI:	8	does that mean?
9	Q. If I touch someone who has	9	A. So that distinction has become
10	opioid use disorder, do I get opioid use	10	important with the new criteria for
11	disorder?	11	diagnosing a substance use disorder with the
12	A. No, but you also don't get HIV.	12	DSM-V, which the DSM-V was a departure
13	Q. If I receive a blood	13	from the DSM-IV in the sense that prior to
14	transfusion from someone with opioid use	14	the DSM-V, the criteria of physiologic
15	disorder, do I get opioid use disorder?	15	tolerance and withdrawal counted toward a
16	A. No.	16	diagnosis of addiction.
17	MR. ARBITBLIT: Counsel, we've	17	But with the evolution to the
18	been going just a over an hour.	18	
19	Is it time for a little break?	19	DSM-V, that no longer counted under the specific circumstances of a patient receiving
20	MR. TSAI: Sure. Off the	20	1
21	record, please.	21	an opioid from a medical doctor and
22	VIDEOGRAPHER: We're going off	22	developing tolerance and withdrawal as a
23	the record, and the time is 9:11 a.m.	23	result of taking that medication, that
24		24	opioid, under a prescription as prescribed,
25	(Off the record at 9:11 a.m.)	25	which de facto made it more difficult,
45	VIDEOGRAPHER: We are now going	45	created a higher threshold, essentially, for
	Page 67		Page 69
1	back on the record, and the time is	1	diagnosing addiction with the DSM-V, but was
2	9:23 a.m.	2	a way of recognizing that the physiologic
3	QUESTIONS BY MR. TSAI:	3	adaptation to opioids occurs to patients
4	Q. And just one quick note: In	4	taking opioids with a medical with a
5	most depositions, we don't have this handy	5	medical prescription.
6	LiveNote screen, and I've noticed that you've	6	And so the DSM-V was an attempt
7	been hearing my questions but also reading.	7	to distinguish between those individuals who
8	If I could ask you just to	8	developed physiologic dependence under the
9	listen to my questions. If you need	9	
	, <u>, , , , , , , , , , , , , , , , , , </u>		care of a doctor versus those individuals who
10	clarification, you can certainly look, but	10	developed physiologic dependence, probably
11	clarification, you can certainly look, but this does if you kind of double up, it	10 11	developed physiologic dependence, probably also in many instances under the care of a
11 12	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.	10 11 12	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral
11 12 13	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct	10 11 12 13	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem
11 12 13 14	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You	10 11 12 13 14	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.
11 12 13 14 15	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are	10 11 12 13 14 15	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?
11 12 13 14 15 16	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation.	10 11 12 13 14 15	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the
11 12 13 14 15 16 17	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation. Do what you need to do to	10 11 12 13 14 15 16 17	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the changes that were implemented in DSM-V's
11 12 13 14 15 16 17	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation.  Do what you need to do to understand the question.	10 11 12 13 14 15 16 17	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the changes that were implemented in DSM-V's diagnostic criteria for opioid use disorder?
11 12 13 14 15 16 17 18	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation. Do what you need to do to understand the question.  QUESTIONS BY MR. TSAI:	10 11 12 13 14 15 16 17 18	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the changes that were implemented in DSM-V's diagnostic criteria for opioid use disorder?  A. I accept those changes. I
11 12 13 14 15 16 17 18 19 20	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation.  Do what you need to do to understand the question.  QUESTIONS BY MR. TSAI:  Q. So	10 11 12 13 14 15 16 17 18 19 20	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the changes that were implemented in DSM-V's diagnostic criteria for opioid use disorder?  A. I accept those changes. I think that those that the physiologic
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11 12 13 14 15 16 17 18 19 20 21 22 23	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation.  Do what you need to do to understand the question.  QUESTIONS BY MR. TSAI: Q. So MR. ARBITBLIT: That's why the screen's here. QUESTIONS BY MR. TSAI:	10 11 12 13 14 15 16 17 18 19 20 21 22 23	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the changes that were implemented in DSM-V's diagnostic criteria for opioid use disorder?  A. I accept those changes. I think that those that the physiologic dependence, so the neurobiological changes that occur in the brain as a result of physical dependence on the opioid, can't be
11 12 13 14 15 16 17 18 19 20 21 22	clarification, you can certainly look, but this does if you kind of double up, it does take up more time.  MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation. Do what you need to do to understand the question.  QUESTIONS BY MR. TSAI: Q. So MR. ARBITBLIT: That's why the screen's here.	10 11 12 13 14 15 16 17 18 19 20 21 22	developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.  Does that answer your question?  Q. So do you agree with the changes that were implemented in DSM-V's diagnostic criteria for opioid use disorder?  A. I accept those changes. I think that those that the physiologic dependence, so the neurobiological changes that occur in the brain as a result of

	Page 74		Page 76
1	QUESTIONS BY MR. TSAI:	1	dependence?
2	Q. And discontinuation phenomenon,	2	MR. ARBITBLIT: Object to form.
3	that is, when a person using an	3	THE WITNESS: Almost always,
4	antidepressant is going off of it, is	4	yes.
5	tapering off or down?	5	QUESTIONS BY MR. TSAI:
6	A. That's right.	6	Q. Does it inevitably lead to
7	Q. And they experience withdrawal?	7	dependence?
8	MR. ARBITBLIT: Object to form.	8	A. In the vast majority of cases,
9	THE WITNESS: They experience	9	yes.
10	some physical symptoms associated with	10	Q. Does it immediately and
11	that taper process.	11	automatically lead to dependence?
12	QUESTIONS BY MR. TSAI:	12	MR. ARBITBLIT: Object to form.
13	Q. So am I right that	13	THE WITNESS: Not immediately.
14	individuals some individuals classified as	14	It takes people varying degrees of
15	having an opioid use disorder under the prior	15	time. Some people become dependent
16	DSM-IV framework would not be deemed to have	16	within a matter of days to weeks.
17	an opioid use disorder under the current	17	Other people can go much
18	updated definition?	18	longer, but in the vast majority of
19	A. That's correct.	19	cases, people who take opioids daily
20	Q. Okay. And so in tieing your	20	for an extended period of time become
21	Dependence Effect phenomenon to dependence as	21	physically dependent on those opioids,
22	opposed to addiction, that's a broader net;	22	such that they need more and more to
23	am I right?	23	get the same effect. And when they
24	A. Yes.	24	reduce their dose or stop taking them
25	Q. It's more permissive?	25	for some reason, they experience
23		23	· ·
1	Page 75	1	Page 77
1	MR. ARBITBLIT: Object to form.	1	withdrawal.
2	THE WITNESS: What do you mean	2	And in many cases the
3	by "permissive"?	3	withdrawal is excruciating and very
4	QUESTIONS BY MR. TSAI:	4	debilitating.
5	Q. Well, you said lower bar, upper	5	QUESTIONS BY MR. TSAI:
6	bar.	6	Q. Have you reviewed any
7	So let me get it's a lower	7	information or conducted any analysis to
8	bar to be considered dependent in your view	8	quantify what individuals in the counties,
9	as opposed to addicted?	9	Cuyahoga and Summit Counties, became opioid
10	A. I would say the criteria are	10	dependent?
11	different. I don't think I would use lower	11	MR. ARBITBLIT: Object to form.
12	bar versus higher bar. They're now	12	THE WITNESS: Is this getting
13	categorized as distinct and separate	13	back to what we talked about before,
14	phenomenon.	14	this question?
15	The point of describing the	15	QUESTIONS BY MR. TSAI:
16	Dependence Effect is to communicate that	16	Q. I don't think I asked about
17	there are more than 10 million people in this	17	opioid dependence.
ıιQ	country who have taken opioids as prescribed	18	A. Okay. Can you say the question
18	and become physically dependent and that	19	again?
19			() Have you marriaged one
19 20	that's a very serious and morbid physical	20	Q. Have you reviewed any
19 20 21	that's a very serious and morbid physical condition, that being dependent on opioids is	21	information or conducted any analysis to
19 20 21 22	that's a very serious and morbid physical condition, that being dependent on opioids is not some kind of benign or easily reversible	21 22	information or conducted any analysis to quantify what individuals in the counties,
19 20 21 22 23	that's a very serious and morbid physical condition, that being dependent on opioids is not some kind of benign or easily reversible phenomenon.	21 22 23	information or conducted any analysis to quantify what individuals in the counties, Cuyahoga and Summit Counties, became opioid
19 20 21 22	that's a very serious and morbid physical condition, that being dependent on opioids is not some kind of benign or easily reversible	21 22	information or conducted any analysis to quantify what individuals in the counties,

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Page 78
                                                                                                   Page 80
 1
              THE WITNESS: No. No.
                                                         1
                                                                        Yes.
                                                                  A.
 2
       QUESTIONS BY MR. TSAI:
                                                         2
                                                                        Okay. Does the Dependence
                                                                  O.
 3
           Q. Can the Dependence Effect
                                                         3
                                                               Effect include within its scope individuals
       phenomenon predict what individuals in what
                                                               who deliberately misused an opioid medication
 4
                                                         4
       particular cities or counties will become
                                                               knowing that they were not using it for its
 5
                                                         5
       addicted to or overdose from opioids?
                                                               intended indication; for example, crushing
 6
                                                         6
 7
           A. Yes.
                                                         7
                                                               it, snorting it for a high, for euphoria,
          Q. How so?
 8
                                                         8
                                                               instead of to treat an indicated pain
 9
               People who are dependent on
                                                               condition?
           A.
                                                         9
       opioids are at increased risk to suffer from
10
                                                       10
                                                                  A.
                                                                       Yes.
       overdose from those opioids, even separate
11
                                                       11
                                                                  O.
                                                                       So the third of your triagrid
       from being diagnosed from opioids, and I can
                                                               {phonetic} is the Gateway Effect, capital G,
12
                                                       12
       explain that physiology, if you would like.
13
                                                       13
                                                               capital E.
              It's also true that people who
14
                                                       14
                                                                       So in -- on page 86 of your
       are opioid dependent are at very high risk to
                                                               report, Exhibit 1, you describe the Gateway
15
                                                       15
       go on to meet DSM-V criteria for opioid
                                                               Effect as -- you say, "The trajectory to
16
                                                       16
                                                               addiction begins with exposure." Is that
17
       addiction.
                                                       17
18
           Q.
               Well, let me ask it from this
                                                       18
                                                               right?
19
       angle.
                                                       19
                                                                  A.
                                                                       That's right.
                                                                       Okay. So have you ever
20
              Have you ever tested the
                                                       20
                                                               tested -- well -- actually, strike that.
21
       Dependence Effect phenomenon to, for example,
                                                       21
22
       rule out the inclusion of individuals who
                                                       22
                                                                       I wanted to ask one more
23
       deliberately committed a crime in obtaining
                                                               question about the Dependence Effect.
                                                       23
24
       and using opioids?
                                                                       Have you ever published the
                                                       24
25
              MR. ARBITBLIT: Object to form.
                                                       25
                                                               theory of the Dependence Effect in any
                                           Page 79
                                                                                                   Page 81
 1
               THE WITNESS: I don't
                                                         1
                                                               peer-reviewed, scientific journal?
                                                         2
                                                                   A. I haven't -- I haven't -- I
 2
           understand your question.
 3
       QUESTIONS BY MR. TSAI:
                                                         3
                                                               haven't specifically used that terminology,
           Q. Have you ever tested the
                                                               but in the JAMA article that we published on
 4
                                                         4
 5
       Dependence Effect phenomenon -- well, let me
                                                         5
                                                               buprenorphine prescribing, we do talk about
                                                               the exposure and the millions of people
 6
       ask it this way.
                                                         6
 7
               Does the Dependence Effect
                                                         7
                                                               exposed to opioids through a medical
                                                               prescription, the vast majority of whom
 8
       include within its scope individuals who
                                                         8
       deliberately committed a crime in obtaining
                                                               probably are opioid dependent.
 9
                                                         9
                                                                   O. And have you specifically used
10
       and using opioids?
                                                       10
               MR. ARBITBLIT: Object to form.
                                                               the terminology of the Tsunami Effect,
11
                                                       11
12
               THE WITNESS: Yes.
                                                       12
                                                               capital T, capital E, in any peer-reviewed
                                                               scientific journal?
13
       QUESTIONS BY MR. TSAI:
                                                       13
14
           Q. Does the Dependence Effect
                                                       14
                                                                   A.
                                                                        No.
       include within its scope individuals who
                                                                   Q. Have you ever tested the
15
                                                       15
       deliberately misused a prescription opioid
                                                               Gateway Effect, going to the third leg, to
16
                                                       16
       medication knowing that medication was not
17
                                                       17
                                                               quantify what percentage of persons
       prescribed to him or her?
                                                               ultimately addicted to illegal heroin, or
18
                                                       18
           A. The Dependence Effect would
                                                               fentanyl, were individuals who started out
19
                                                       19
       include anybody who has become
                                                               purely with no substance abuse history and
20
                                                       20
21
       physiologically dependent on opioids.
                                                       21
                                                               whose initial exposure was via a medically
22
           Q. And that would include
                                                       22
                                                               appropriate prescription of an opioid
       individuals residing in Cuyahoga and Summit
                                                       23
                                                               medication?
23
       Counties whose exposure to opioids was via
                                                       24
24
                                                                       MR. ARBITBLIT: Object to form.
25
       opioids that were not prescribed to them?
                                                       25
                                                                       THE WITNESS: Are you asking me
```

Page 82 Page 84 1 if I've personally done that through that medical prescription, as 2 quantitative research? distinct from the Tsunami Effect, which is 3 **QUESTIONS BY MR. TSAI:** those individuals who -- which includes those 4 Q. Yes. individuals who used an opioid not 5 I have not. necessarily prescribed to them. A. 6 Okay. So the -- you know, the O. Have you ever used the specific terminology of the Gateway Effect and beginning bound of the set of individuals published that observation in any that you define as within the Gateway Effect 9 peer-reviewed scientific journal? are those individuals who received a 10 prescription directly from a doctor? A. No. 11 Q. Have you ever tested the 11 Yes, and thank you for allowing Gateway Effect phenomenon to rule out the 12 12 me the opportunity to clarify that. 13 inclusion of individuals who deliberately So the Gateway theory posits a 14 14 committed a crime in obtaining and using particular direction of events: First, 15 opioids? prescription opioids prescribed by a doctor, 16 A. I wouldn't rule out those and then later illegal heroin or street 17 17 individuals. fentanyl addiction; is that right? 18 18 Okay. So the Gateway Effect, A. Not necessarily. O. 19 So that individual -- so you're 19 as you envision it, as you define it, does 20 include within its scope persons, including right in the sense that it posits an persons in Cuyahoga and Summit County, who 21 individual who began with a prescription of deliberately committed a crime in obtaining an opioid from a doctor, but it -- and it 23 23 and using opioids? could include those individuals who then turn 24 A. Yes. to illicit sources of heroin, but it also 25 Does the Gateway Effect include includes those individuals who become Q. Page 83 Page 85 within its scope individuals who deliberately addicted in an ongoing matter -- manner using misused a prescription opioid medication the opioids prescribed by that doctor. knowing that medication was not prescribed to Have you ever tested whether the Gateway Effect is confounded by them? 5 individuals who had already used heroin A. Yes. 6 Does the Gateway Effect include before prescription opioid medications? MR. ARBITBLIT: Object to form. within its scope individuals who deliberately misused a prescription opioid medication 8 THE WITNESS: Well, that's 9 knowing it -- knowing that they were using it 9 something that the McCabe article 10 10 contrary to its intended indication and looked at, and I think one of the 11 11 approved indication, for example, to get a salient findings there is it's really 12 12 high instead of treating pain? the combined effect of access to 13 13 So I would like to go back and nonmedical opioids, plus medical use, amend what I said previously about the 14 that confers risk. It's not one or 15 Gateway Effect and refer to my report, which the other in isolation, and both of on page 86, specifically says that the 16 those individual groups can become 17 Gateway Effect describes those individuals 17 addicted. who became exposed and addicted, including 18 So people can get addicted 19 19 individuals who turned from prescription entirely through a medical 20 20 prescription and not engage in opioids to illicit sources of opioids such as

21

22

23

24

their risk.

So what I'm -- the group I'm

medical prescription and then became addicted | 25

referring to in the Gateway Effect is, in

fact, those individuals who started with a

21

22

heroin.

nonmedical use. They can engage in

exposed medically; thus compounding

nonmedical use and then also be

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Page 86
                                                                                                  Page 88
 1
        OUESTIONS BY MR. TSAI:
                                                        1
                                                                      So, for example, I've had many
                 So you would rely on the McCabe
                                                        2
                                                              patients who were in recovery from an
 2
 3
       study's findings in regard to those groups
                                                        3
                                                              addiction to something else, who then got
                                                              exposed to an opioid through a medical
 4
        that you mentioned?
                                                         4
               MR. ARBITBLIT: Object to form.
                                                              prescription and became addicted to that
 5
                                                        5
                                                              opioid or relapsed to their other substance
 6
               THE WITNESS: No, I'm not
                                                        6
 7
           relying on the McCabe study findings.
                                                        7
                                                              who otherwise, I believe, would not have done
 8
           As I said before, I've done my own
                                                        8
                                                              so were it not for the unnecessary exposure
                                                              to that opioid through a medical
 9
           qualitative research, and I've also --
                                                        9
10
           I have vast experiential knowledge of
                                                       10
                                                              prescription.
           this problem from the many patients
                                                                  Q. And individuals with a history
11
                                                       11
12
           I've treated in almost, you know, two
                                                       12
                                                              of substance abuse, and certainly a history
                                                              of diagnosed substance use disorder, are at a
13
                                                       13
           decades.
14
               So I have seen the pattern of
                                                       14
                                                              higher risk of substance abuse disorder; do
           opioid addiction as it has occurred in
                                                              you agree?
15
                                                       15
           those individuals.
                                                                      MR. ARBITBLIT: Object to form.
16
                                                       16
17
        QUESTIONS BY MR. TSAI:
                                                       17
                                                                      THE WITNESS: We do know based
18
           O. Does the Gateway Effect include
                                                       18
                                                                  on retrospective, epidemiologic
                                                                  studies that patients with a personal
19
        within its scope individuals who had first
                                                       19
        used heroin before they used prescription
                                                                  history of substance use disorder are
20
                                                       20
                                                       21
                                                                  at increased risk to develop an opioid
21
        opioids?
22
                                                       22
                                                                  addiction through a medical
           A.
                No.
                                                                  prescription of opioids, yes.
23
                 And how would you know for a
                                                       23
           Q.
                                                              QUESTIONS BY MR. TSAI:
24
       particular person in Cuyahoga or Summit
                                                       24
25
       County with opioid use disorder that medical
                                                       25
                                                                       So you would agree that for
                                           Page 87
                                                                                                  Page 89
                                                              individuals who reside in Cuyahoga and Summit
       history, that sequence?
                                                        1
 1
                                                        2
                                                              County with opioid use disorder, an important
 2
               MR. ARBITBLIT: Object to form.
 3
               THE WITNESS: There are good
                                                        3
                                                              piece of information to know is their history
                                                        4
 4
           national data that have surveyed
                                                              of substance abuse disorder and substance use
 5
           individuals asking them about which --
                                                        5
                                                              history?
 6
           individuals who have become addicted
                                                        6
                                                                     MR. ARBITBLIT: Object to form.
 7
                                                        7
                                                                     THE WITNESS: I don't really
           to opioids, asking them which opioid
 8
           they started with, and over 80 percent
                                                        8
                                                                  consider that that important a piece
 9
           of individuals report that they
                                                        9
                                                                  of history.
10
           started with a prescription opioid.
                                                       10
                                                              QUESTIONS BY MR. TSAI:
        OUESTIONS BY MR. TSAI:
11
                                                       11
                                                                  Q. So despite testifying that
12
                And those -- that statistic
                                                       12
                                                              epidemiology shows that patients with a
                                                              personal history of substance use disorder
13
                                                       13
        includes nonmedical use of prescription
14
       opioids?
                                                       14
                                                              are at an increased risk to develop an opioid
                                                              addiction through a medical prescription of
                                                       15
15
           A. Yes, it does, but it also
                                                              opioids, you wouldn't want to know whether
        includes medical use of prescription opioids.
                                                       16
16
           Q. Have you ever tested whether
                                                       17
                                                              any particular individual in Cuyahoga and
17
                                                              Summit Counties had such a personal history
18
        the Gateway Effect is confounded by
                                                       18
        individuals who had already deliberately
19
                                                       19
                                                              of substance abuse disorder?
        misused or abused other drugs before any
                                                                     MR. ARBITBLIT: Object to form.
20
                                                       20
21
        medical opioid prescription?
                                                       21
                                                                  Argumentative.
22
                There are those cases, and I
                                                       22
                                                                     THE WITNESS: To me what's much
                                                                  more relevant is that they're
23
       have treated those individuals, and to me
                                                       23
                                                                  currently addicted to opioids. I
24
        that doesn't mitigate the problem of
                                                       24
25
       addiction through an opioid prescription.
                                                       25
                                                                  don't consider their past history to
```

23 (Pages 86 to 89)

	Page 90		Page 92
1	inform that problem.	1	the dose over time as that patient
2	Furthermore, we know that many	2	inevitably develops tolerance.
3	people without a past history of	3	That doctor, furthermore,
4	addiction can get addicted to opioids	4	having been misled by the defendants
5	through a doctor's prescription.	5	to believe that no dose is too high,
6	QUESTIONS BY MR. TSAI:	6	will continue to escalate that dose
7	Q. Okay. And since your opinion	7	over months to years until that
8	isn't individual's personal history of	8	patient is at dangerously high doses
9	substance use disorder is not information	9	of opioids and at risk for all kinds
10	that you would need to know, you did not	10	of morbidity and mortality, including
11	review any such information for any actual	11	the risk of addiction.
12	individual with opioid use disorder in	12	And eventually that individual,
13	Cuyahoga and Summit County; am I right?	13	who is on very high doses of opioids,
14	MR. ARBITBLIT: Object to form.	14	has neurologic changes in their brain
15	Object to the preface.	15	such that if they they begin to
16	THE WITNESS: I did not review	16	experience withdrawal often between
17	any individual patient's history.	17	doses, so intradose withdrawal.
18	QUESTIONS BY MR. TSAI:	18	They have the sensation that
19	Q. So based upon your clinical	19	was validated by their doctor, but
20	experience, can you walk us through the steps	20	which is probably not the case, that
21	between a person receiving a prescription	21	the they need the opioids to treat
22	from a doctor for an opioid medication and	22	their pain when, in fact, taking the
23	the ultimate outcome of going out to a street	23	opioids is most likely just treating
24	dealer and seeking illegal, nonprescribed,	24	withdrawal from the last dose, but the
25	nonregulated heroin or fentanyl?	25	physiology and the pain of withdrawal
	Page 91		Page 93
1	How does that how does the	1	drives that individual to then become
2	Gateway Effect play out in your mind from	2	very preoccupied with their pain, very
3	prescription to going out into a street	3	preoccupied with the opioids, spending
4	dealer?	4	more and more time at the doctor's
5	MR. ARBITBLIT: Object to form.	5	office with pain complaints, reporting
6	Vague. Compound.	6	that the opioids are no longer
7	THE WITNESS: An individual	7	working, because they don't work in
8	presents in a medical clinic with pain	8	most cases for chronic pain.
9	and is prescribed opioids by that	9	And again, the compassionate
10	doctor.	10	doctor, being told that no dose is too
11	The doctor has been misled by	11	high, continues to escalate until that
12	false promotional statements on the	12	individual is at a very, very high
13	part of defendants to believe that	13	dose, and that individual spends
14	there are benefits to the use of	14	almost all of their time possibly
15	opioids used long term in the	15	going to the emergency room to try to
16	treatment of pain, despite the absence	16	get more opioids to help with their
17	of evidence for that. And that doctor	17	worsened pain and their withdrawal and
18	has also been told that the risks are	18	their tolerance, to the point that
19	very small for addiction as long as	19	that individual has developed a
20	that individual is being prescribed	20	full-blown opioid addiction within the
21	opioids for a pain condition.	21	context of medical care.
22	So that well-intentioned and	22	Now, should it happen that at
23	compassionate doctor, who is trying to	23	some point that doctor retires or that
24	do the right thing, will continue that	24	doctor gets ill and can't treat that
25	opioid prescription and even increase	25	person anymore or that individual

	Page 118		Page 120
1		1	
1	do not walk through the gateway to illegal	1	I don't want to do this to
2	heroin?	2	cause animosity. I do think, based on
3	MR. ARBITBLIT: Object to form.	3	my own experience and the rule itself,
4	QUESTIONS BY MR. TSAI:	4	that anything that in fairness should
5	Q. They turn away or otherwise	5	be read with the same document as
6	take another path?	6	you've brought in to evidence should
7	A. That is what it says here, yes.	7	be read, and that's what the Rule of
8	Q. Okay. So then going back to	8	Completeness, Federal Rule 106 says.
9	page 1, the first page of the Muhuri article,	9	If you have something that you
10	in the introduction section, if you look down	10	think specifically overrules that rule
11	to the second paragraph, the authors observe	11	in our deposition protocol, please let
12	that this progression from opioid	12	me know what it is. Otherwise, I'm
13	prescription opioid medications to illegal	13	going to do it again, and I don't want
14	heroin may result simply because heroin may	14	to do it again and have a fight with
15	be cheaper or easier for them to get in some	15	you. That's not my purpose.
16	locations.	16	MR. TSAI: We have a limited
17	Do you see that?	17	time on the record. Suffice it to
18	A. Is that here on this first	18	say, I disagree.
19	page?	19	MR. ARBITBLIT: You can
20	Q. Yeah. It's the first page	20	disagree, and you can reserve your
21	I'm sorry, I have a different right.	21	rights, but I'm just going to read one
22	Sorry.	22	sentence from the same Muhuri article
23	It is the second page of your	23	that says, "There are many plausible
24	exhibit. The Bates number ends in 6028, and	24	explanations for this finding,
25	it's the first full paragraph on that page.	25	including the Gateway theory of drug
	Page 119		Page 121
1	It says, "This progression may result simply	1	d a state of the
			use, that posits that the use of some
	because heroin may be cheaper or easier for		use, that posits that the use of some
2 3	because heroin may be cheaper or easier for them to get in some locations."	2	drugs may expose individuals to a
3	them to get in some locations."	2 3	drugs may expose individuals to a repertoire of biological and
3 4	them to get in some locations."  Do you see that?	2 3 4	drugs may expose individuals to a repertoire of biological and behavioral factors that could
3 4 5	them to get in some locations."  Do you see that?  A. Yes.	2 3 4 5	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other
3 4 5 6	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did	2 3 4 5 6	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."
3 4 5 6 7	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did you review any information or do any analysis	2 3 4 5 6 7	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043,
3 4 5 6 7 8	them to get in some locations."  Do you see that?  A. Yes.  Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched	2 3 4 5 6 7 8	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights
3 4 5 6 7 8 9	them to get in some locations."  Do you see that?  A. Yes.  Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or	2 3 4 5 6 7 8 9	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to
3 4 5 6 7 8 9	them to get in some locations."  Do you see that?  A. Yes.  Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied	2 3 4 5 6 7 8 9	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've
3 4 5 6 7 8 9 10	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?	2 3 4 5 6 7 8 9 10	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes
3 4 5 6 7 8 9 10 11	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No.	2 3 4 5 6 7 8 9 10 11	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.
3 4 5 6 7 8 9 10 11 12 13	them to get in some locations."  Do you see that?  A. Yes.  Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No.  Q. Okay.	2 3 4 5 6 7 8 9 10 11 12	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.  MR. TSAI: And not only do I
3 4 5 6 7 8 9 10 11 12 13 14	them to get in some locations."  Do you see that?  A. Yes.  Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No.  Q. Okay.  MR. TSAI: Could we get Tab 8,	2 3 4 5 6 7 8 9 10 11 12 13	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.  MR. TSAI: And not only do I reserve rights, I very much object to
3 4 5 6 7 8 9 10 11 12 13 14 15	them to get in some locations."  Do you see that?  A. Yes.  Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No.  Q. Okay.  MR. TSAI: Could we get Tab 8, please?	2 3 4 5 6 7 8 9 10 11 12 13 14 15	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.  MR. TSAI: And not only do I reserve rights, I very much object to counsel's eating up the time on the
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3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No. Q. Okay.  MR. TSAI: Could we get Tab 8, please?  MR. ARBITBLIT: Okay. Counsel, I don't want to have a disagreement	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.  MR. TSAI: And not only do I reserve rights, I very much object to counsel's eating up the time on the record with his testimony and colloquy, which is prohibited under
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3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No. Q. Okay.  MR. TSAI: Could we get Tab 8, please?  MR. ARBITBLIT: Okay. Counsel, I don't want to have a disagreement with you about this, but I don't see in our summary of the protocol anything that would overrule Federal Rule 106.  If you have something that you think prevents from me reading for the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.  MR. TSAI: And not only do I reserve rights, I very much object to counsel's eating up the time on the record with his testimony and colloquy, which is prohibited under the deposition protocol expressly, so I want to move on.  Can we get Tab 8, please?  (Lembke Exhibit 6 marked for identification.)  QUESTIONS BY MR. TSAI:
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	them to get in some locations."  Do you see that?  A. Yes. Q. Okay. Do you have any did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied applies in Cuyahoga or in Summit Counties?  A. No. Q. Okay.  MR. TSAI: Could we get Tab 8, please?  MR. ARBITBLIT: Okay. Counsel, I don't want to have a disagreement with you about this, but I don't see in our summary of the protocol anything that would overrule Federal Rule 106.  If you have something that you	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."  And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.  MR. TSAI: And not only do I reserve rights, I very much object to counsel's eating up the time on the record with his testimony and colloquy, which is prohibited under the deposition protocol expressly, so I want to move on.  Can we get Tab 8, please?  (Lembke Exhibit 6 marked for identification.)

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Page 134
                                                                                                  Page 136
                MR. ARBITBLIT: Object to form.
                                                         1
                                                               than prescription opioids?
 1
                                                                        I did not review individual
 2
        QUESTIONS BY MR. TSAI:
                                                         2
 3
           Q. That relationship?
                                                         3
                                                               cases.
           A. I think that now I would say
 4
                                                         4
                                                                        Okay. And if we could turn to
        that my opinion has changed vis-à-vis this
                                                               the next page, 157, of the Compton article,
 5
                                                         5
        particular statement in the sense that this
                                                               and the right-hand column, there they give
 6
                                                         6
 7
        is a very general statement, that "the
                                                         7
                                                               statistics that compare heroin use to use of
 8
        relationship between doctors' prescribing
                                                         8
                                                               other substances.
 9
        patterns and the initiation of heroin use
                                                         9
                                                                       So am I reading this correctly,
       remains unclear" because there's not a wealth
                                                        10
                                                               that heroin use over the period that was
10
        of evidence I've reviewed showing there's a
                                                               studied in the -- in this NEJM article also
11
                                                        11
                                                               increased upon nonmedical users of
12
        clear link between receiving an opioid
                                                        12
13
        prescription with a doctor and being at
                                                        13
                                                               stimulants?
        higher risk for progressing to heroin use.
                                                                   A.
14
                                                        14
                                                                        Yes, you're reading it
                 And does that evidence include
15
                                                               correctly.
                                                        15
16
        the studies that we went over just now, the
                                                        16
                                                                   Q. And what are examples of
        NASEM, the Muhuri, the Compton?
17
                                                        17
                                                               stimulants?
18
                 Yes.
                                                        18
                                                                   A. Stimulants -- nicotine is a
                                                               stimulant. Methamphetamine is a stimulant.
19
                 Okay. So going back to
                                                        19
           O.
        Compton -- do you have that article, the
20
                                                        20
                                                               Cocaine is a stimulant.
        Compton article?
                                                        21
                                                                   Q. And during the same time
21
22
           A.
                 Yeah.
                                                        22
                                                               period, heroin use also increased among users
                                                               of tranquilizers, sedatives, cocaine,
23
                 If you could turn to page 156
                                                        23
           O.
                                                               marijuana and alcohol, correct?
        of that article.
                                                        24
24
25
                So in the left-hand column it's
                                                        25
                                                                   A.
                                                                        Yes.
                                          Page 135
                                                                                                  Page 137
       above that heading "Break." The heading
 1
                                                         1
                                                                   Q. Okay. And the next page, 158,
       says, "Heroin use among people who use
 2
                                                         2
                                                               if you look at this first full paragraph, the
 3
       prescription opioids nonmedically."
                                                         3
                                                               first sentence, the authors conclude that, "A
               The sentence right before that,
                                                         4
                                                               key factor underlying the recent increases in
 4
       I'll read it, it says, "Finally, these
 5
                                                         5
                                                               rates of heroin use and overdose may be the
       differential properties and effects are
                                                               low cost and high purity of heroin."
 6
                                                         6
 7
       likely to interact with interindividual
                                                         7
                                                                        Do you see that?
 8
       variability in powerful complex and in
                                                         8
                                                                   A. I do.
       completely predictable ways so that some
 9
                                                         9
                                                                        And so am I reading that
       persons who abuse prescription opioids could
                                                               correctly that the finding is that for --
10
                                                       10
       find heroin less rewarding than prescription
                                                               when some persons who abuse prescription
11
                                                       11
       opioids similarly rewarding or even more
                                                               opioids then subsequently initiate heroin
12
                                                       12
       rewarding."
                                                       13
                                                               use, the cost and availability of heroin on
13
14
               Do you see that?
                                                       14
                                                               the street are primary factors in that
           A. Yes, I do.
15
                                                       15
                                                               process?
           Q. And do you agree with that
16
                                                       16
                                                                   A.
                                                                        To me that statement needs to
17
       statement?
                                                       17
                                                               be put in the larger context of increased
18
           A. I do.
                                                       18
                                                               exposure to heroin through a medical
           Q. All right. For any individuals
                                                               prescription and subsequent development of
19
                                                       19
       in Cuyahoga and Summit Counties with opioid
                                                               opioid addiction to medical heroin --
20
                                                       20
21
       use disorder, did you review any information
                                                       21
                                                               medical opioids, that then put all of those
       or have any other basis to say whether their,
22
                                                       22
                                                               individuals at increased risk to progress to
       as the New England Journal of Medicine put
23
                                                       23
                                                               heroin use.
       it, individual variability was such that they
                                                       24
24
                                                                        So I think that that statement,
       found heroin less similarly or more rewarding
25
                                                       25
                                                               as I read their intention, is that in the
```

35 (Pages 134 to 137)

	Page 166		Page 168
1	mood.	1	Is that still your belief?
2	QUESTIONS BY MR. TSAI:	2	A. Yes.
3	Q. And we're talking about	3	Q. And have you done any work or
4	co-occurring mental illness. Let's talk	4	analysis to quantify to what extent
5	about past history of substance use disorder.	5	benzodiazepines are, as you say, a major
6	Do you agree that past history	6	culprit in the epidemic of prescription
7	of substance use disorder is a	7	overdose deaths plaguing this country?
8	well-established risk factor for opioid use	8	A. So I published an article in
9	disorder?	9	the New England Journal of Medicine talking
10	A. Yes.	10	about the benzodiazepine problem. The
11	Q. And let me just give an	11	article was not based on my own analysis, but
12	example.	12	was a review of published literature and some
13	Edlund found that about half of	13	summative interpretations of how to
14	opioid overdose deaths involved another drug,	14	intervene.
15	most commonly benzodiazepines.	15	And based on other
16	Do you agree with that	16	publications, we found a seven-time increased
17	observation?	17	mortality involved benzodiazepines between
18	MR. ARBITBLIT: Object to form.	18	late 1990s and 2016, two-thirds of which also
19	THE WITNESS: I agree that a	19	involved an opioid.
20	large percentage of opioid overdose	20	Q. And did you, in connection with
21	deaths involve another drug, commonly	21	this article, dig into or quantify whether
22	a sedative like a benzodiazepine.	22	the benzodiazepine use occurred before or
23	QUESTIONS BY MR. TSAI:	23	after the prescription opioid use?
24	Q. And can you give some examples	24	A. No.
25	of benzodiazepines?	25	Q. So in your report on page 89,
23	-	23	
_	Page 167	1	Page 169
1	A. Sure: Valium, Klonopin, Xanax,	1	you say, "Economic downturn and the E-flux of
2	Ativan, Librium.	2	manufacturing jobs in towns across America in
3	Q. And you talk about a large	3	the last 30 years have contributed to
4	percentage of opioid-related overdoses	4	so-called deaths of despair, early mortality
5	involve an individual that, to put it	5	in middle-aged, non-Hispanic whites due
6	bluntly, has another addictive substance in	6 7	primarily to drug overdose."
7	their system.		Do you remember that passage?
8	What do you mean by a large	8	A. What page?
9	percentage? Can you be more specific?	9	Q. I believe it's page 89 of your
10	A. Two-thirds of deaths involving	10	report, Exhibit 1, subsection B, and you cite
11	a benzodiazepine also involve an opioid	11	to the Case, Deaton study.
12	prescription.	12	Do you recall that?
13	Q. And if you could turn to your	13	A. Yes.
14	book, "Drug Dealer, MD," and page 146, the	14	MR. TSAI: So can we get
15	internal page number of your book, and the	15	Tab 18?
16	Bates number for that ends in 5680.	16	A. Oh, yeah. I found it.
17	A. Uh-huh.	17	(Lembke Exhibit 8 marked for
18	Q. It's the first full paragraph.	18	identification.)
19	It says, "Today, doctors' prescription for	19	QUESTIONS BY MR. TSAI:
20	benzodiazepines continue to rise and are a	20	Q. Okay. So if you could turn
21	major culprit in the epidemic of prescription	21	to the first page of the Case, Deaton
$\sim$	overdose deaths plaguing this country.	22	article, this has a broad conclusion that
22	Nignathalasa lasa alka saka 1991		
23	Nonetheless, benzodiazepines are relatively	23	"from 1999 to 2013, there was an increase in
	Nonetheless, benzodiazepines are relatively ignored in the national discussion on rising rates of addiction."	23 24 25	"from 1999 to 2013, there was an increase in mortality among middle-aged, white, non-Hispanic Americans from all causes."

```
Page 170
                                                                                                Page 172
 1
               Is that right?
                                                        1
                                                                  versus economic disadvantage.
 2
                That's correct.
                                                        2
                                                              QUESTIONS BY MR. TSAI:
 3
           O.
                 And in the introduction, the
                                                        3
                                                                  Q. Have you in this case yourself
                                                              done any work to rule out the likelihood that
 4
        bold introductory section, this Case, Deaton
                                                        4
                                                              social and economic problems preexisting in
 5
        study concluded that "these increased
                                                        5
                                                              the counties were an important contributing
 6
       mortality was due to various factors,
                                                        6
       including drug and alcohol poisonings,
 7
                                                        7
                                                              factor to observe opioid use disorder and
       suicide, chronic liver disease and
 8
                                                        8
                                                              mortality?
 9
       cirrhosis."
                                                        9
                                                                      MR. ARBITBLIT: Object to form.
10
               Is that right?
                                                      10
                                                                      THE WITNESS: I have stated in
11
           A. Yes.
                                                      11
                                                                  my report that economic factors were a
12
                 And second to the last -- just
                                                      12
                                                                  factor, but not the most important
13
        to be clear, do opioids cause deterioration
                                                      13
                                                                  factor.
        or chronic liver disease or cirrhosis?
14
                                                      14
                                                                      The most important factor is
                                                                  the supply of opioids in that county.
15
                 Not typically.
           A.
                                                      15
16
                 Okay. And is it fair to say
                                                      16
                                                                  That is my opinion.
           O.
                                                      17
17
        that those drivers of the increased mortality
                                                              QUESTIONS BY MR. TSAI:
18
        noted in the study were likely due to alcohol
                                                      18
                                                                  O. And your opinion regarding the
        use disorder or alcoholism colloquially?
                                                              relative degree of contribution of social and
19
                                                      19
20
                                                      20
                                                              economic problems, economic disadvantage,
           A.
                 Yes.
                 Okay. And in your report, you
                                                      21
                                                              versus any conduct by the defendants, is that
21
           O.
22
        acknowledge and agree that, quote/unquote,
                                                      22
                                                              based on grappling with any county-specific
        "economic disadvantage is a contributing
23
                                                      23
                                                              data, or is it only based on the Ruhm study
        factor to opioid-related mortality risk."
24
                                                      24
                                                              that you cited?
2.5
               Is that correct?
                                                      25
                                                                      MR. ARBITBLIT: Object to form.
                                                                                                Page 173
                                         Page 171
 1
           A. I would agree that it is one
                                                        1
                                                                      THE WITNESS: It's based on my
 2
       factor, but I also cited the Ruhm study,
                                                        2
                                                                  reading of the literature, not just
 3
       arguing that economic disadvantage
                                                        3
                                                                  this particular study, but also other
 4
       contributes only 10 to 20 percent of
                                                                  studies showing that the amount of
                                                        4
       mortality risk attributable to opioids,
                                                                  opioid prescribing in a given
 5
                                                        5
       whereas the larger share of risk is due to
                                                                  geographic region is the biggest
 6
                                                        6
 7
       the supply of opioids in a given geographic
                                                        7
                                                                  predictor of opioid use disorder and
 8
       region.
                                                        8
                                                                  opioid overdose in that region.
                                                                      MR. TSAI: Okay. Can we do tab
 9
               Okay. And have you conducted
                                                        9
           Q.
       any quantitative analysis of your own to
10
                                                      10
       quantify the specific contribution of
11
                                                      11
                                                                      (Lembke Exhibit 9 marked for
       economic disadvantage to opioid-related
12
                                                      12
                                                                  identification.)
13
       mortality risk?
                                                              QUESTIONS BY MR. TSAI:
                                                      13
14
           A. No.
                                                      14
                                                                  Q. So I would like to dig down
                                                              into the actual ground floor circumstances of
15
           Q. Do you have a model or an
                                                      15
       analytical framework to untangle any costs
                                                              how folks get prescribed opioid medications.
16
                                                      16
       related to any such preexisting social and
                                                                      So do you recall that last year
17
                                                      17
       economic problems versus any conduct by any
                                                              you gave a live interview on KQED with
18
                                                      18
       defendant with respect to Cuyahoga and Summit
                                                              Michael Krasny for a program entitled
19
                                                      19
                                                              "Medical Community Divided on Medicare's
20
       Counties?
                                                      20
21
               MR. ARBITBLIT: Object to form.
                                                      21
                                                              Policy to Shorten High-Dose Opioid
22
               THE WITNESS: I think that the
                                                      22
                                                              Prescriptions"?
23
           Ruhm study could be used to inform a
                                                      23
                                                                  A.
                                                                       Yes, I do.
           model with respect to the risk
                                                                       Okay. And the exhibit that
24
                                                       24
25
           incurred by the supply of opioids
                                                       25
                                                              we've just put in front of you, does this
```

44 (Pages 170 to 173)

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Page 174
                                                                                                   Page 176
        appear to be a true and correct transcript of
                                                          1
 1
                                                                 role.
        that interview that you participated in?
                                                          2
 2
                                                                    Q.
                                                                          Okay. In your opinion -- is it
 3
           A.
                 Yes, it does.
                                                          3
                                                                 still your opinion that certain individuals
                 Okay. And if you turn to
                                                          4
                                                                 who have turned to disability payments are
 4
            O.
                                                                 being forced to take certain types of
 5
        page 8, they may have misspelled your name,
                                                          5
        but the Anna Lembke referred to, that's you?
                                                                 medications to justify the sick role?
 6
                                                          6
 7
                 Which page?
                                                          7
                                                                         So this is part of -- this is
 8
                 It's page 8 of this exhibit.
                                                          8
                                                                 an excerpt from, as I state here, a much more
           Q.
                                                          9
                                                                 complicated issue that I address more
 9
                 Yes.
           A.
                                                         10
                                                                 thoroughly in my book regarding how
10
            O.
                 Okay. So if you could turn to
        page 22 of the exhibit, and I'll start with
                                                                 disability can sometimes consciously or
11
                                                        11
        line 2 of that page. I'll just read it.
12
                                                        12
                                                                 otherwise encourage people living in poverty
                You stated --
                                                        13
                                                                 to adopt the sick role as a way to get
13
14
           A.
                I'm sorry.
                                                        14
                                                                 disability payments.
                                                                         And in order to legitimize the
                 Oh, sure.
                                                        15
15
           Q.
                 I have two sets of page numbers
                                                        16
                                                                 sick role, they have to participate in that
16
            A.
       here. Is this page 7, parentheses 22 to 25?
                                                        17
                                                                 health care system, and in the '90s and early
17
                                                                 aughts and through today, it turns out
18
                 That's correct.
                                                        18
           Q.
                                                                 participating in the health care system as a
19
                 Okay.
                                                        19
            A.
                                                                 pain patient was actually dangerous because
                 And it's split up into
                                                         20
20
            O.
        quadrants. So it's the left-hand quadrant,
                                                                 that -- the risk of being exposed
21
                                                         21
22
        page 22.
                                                        22
                                                                 unnecessarily to opioids was and continues to
                                                                 be very high, and exposure to opioids is one
23
                 Yeah.
                                                         23
            A.
                                                                 of the major risk factors for addiction.
24
                 And you stated, "While it's a
                                                        24
            Q.
25
        very complicated connection that I do address
                                                        25
                                                                         So you use the term "forced to
                                           Page 175
                                                                                                   Page 177
                                                          1
                                                                take certain types of medications." Who in
 1
       in my book, it's hard to kind of put it into
       a sound bite, but in general, you know,
                                                          2
                                                                your opinion is forcing these individuals to
 2
 3
       people who are suffering from poverty,
                                                          3
                                                                take opioid medications to justify what
       unemployment, low education, are also people
                                                          4
                                                                you've called the sick role?
 4
       who are known to be at higher risk for
 5
                                                          5
                                                                        MR. ARBITBLIT: Object to form.
                                                          6
 6
       addiction.
                                                                OUESTIONS BY MR. TSAI:
 7
                                                          7
                                                                    Q. How does that mechanism work?
                "It's also true that this is a
 8
       population that has turn towards disability
                                                          8
                                                                         The individuals are being
                                                                forced by economic circumstance.
       payments as a way to make ends meet, and in
                                                          9
 9
       order to, you know, justify the sick role and
                                                                    Q. And this phenomenon of being
10
                                                         10
       get disability payments. Many of these
                                                                forced by their individual economic
11
                                                         11
12
       individuals have been forced to take certain
                                                         12
                                                                circumstance to take certain medications to
       type of medications because taking a
                                                                justify the sick role, have you reviewed any
13
                                                         13
14
       medication can legitimize the sick role. So
                                                         14
                                                                data specific to Cuyahoga or Summit Counties
       it's a complex web."
                                                         15
                                                                to determine whether that phenomenon occurred
15
               Do you see that?
16
                                                         16
                                                                in the counties?
17
           A. Yes, I do.
                                                        17
                                                                         Nationally we've seen a huge
           Q. What is "justifying the sick
                                                                increase in the number of people going on to
18
                                                         18
       role"? What does that mean?
                                                                disability for chronic pain conditions. For
19
                                                         19
                                                                example, Social Security Disability insurance
           A. Well, that's a term that goes
20
                                                         20
21
       back to Talcott Parsons, who identified
                                                         21
                                                                today, there are more than 8 million people
22
       social roles that people adopt, and anybody
                                                         22
                                                                enrolled in Social Security Disability
       who participates in the health care system
                                                         23
                                                                insurance, primarily for chronic pain
23
       and views themselves as a, quote/unquote,
                                                         24
24
                                                                conditions.
25
       patient is someone who has adopted the sick
                                                         25
                                                                        So I believe that I can
```

	Page 178		Page 180
1	extrapolate that to include Cuyahoga and	1	These are all pretty
2	Summit Counties, that there are individuals	2	qualitative, would you agree?
3	there who with chronic conditions who have	3	MR. ARBITBLIT: Object to form.
4	gone on disability.	4	THE WITNESS: Yes.
5	Q. Have you done the exercise of	5	QUESTIONS BY MR. TSAI:
6	extrapolating specifically to Cuyahoga and	6	Q. Can you point to a specific
7	Summit Counties?	7	instance, act, that fits the scenario that
8	A. Do you mean a quantitative	8	you've outlined?
9	analysis?	9	MR. ARBITBLIT: Object to form.
10	Q. Yes.	10	THE WITNESS: Yeah.
11	A. No.	11	So in my report, I talk about
12	Q. Is it your opinion that	12	the Wisconsin Pain and Policy Study
13	defendants have any role in structuring or	13	Group, and I provide evidence that
14	implementing the Social Security Disability	$\begin{vmatrix} 13 \\ 14 \end{vmatrix}$	the that industry funded the Pain &
15	network?	15	Policy Study Group, defendants funded
16	MR. ARBITBLIT: Object to form.	16	the Pain & Policy Study Group, over a
17	THE WITNESS: I think	17	period of many years.
18	defendants have had a major role in	18	And the Pain & Policy Study
19	the narrative around how chronic pain	19	Group, in turn, carried out programs
20	should be treated for patients who are	20	that benefitted the industry, not only
21	participating in the health care	21	by increasing access to opioids and
22	system. And as a result, patients	22	
23	have been endangered because of being	23	limiting regulatory scrutinary {sic}, but also changing the culture around
24	exposed to dangerous the dangerous	24	pain treatment and identifying a model
25	substance that is opioids.	25	in which doctors feared retribution if
23	•	25	
	Page 179		Page 181
1	QUESTIONS BY MR. TSAI:	1	they didn't use opioids to treat pain.
2	Q. Though, that's kind of	2	QUESTIONS BY MR. TSAI:
3	confusing to me. The narrative is it's a	3	Q. Can you point to any instance
4	very broad term.	4	where anyone providing funds had a role in
5	A. Uh-huh.	5	the design and conduct of the specific study
6	Q. Can you point to any specific	6	or program that you're referring to?
7	instance where any conduct by a defendant	7	MR. ARBITBLIT: Object to form.
8	caused an individual within the disability	8	THE WITNESS: On October 9,
9	payment network, for example, Social Security	9	2002, Joranson wrote to Mr. Kaiko, a
10	Disability, to have been forced to take their	10	Purdue representative, quote, "For the
11	particular opioid medication?	11	past several years, without your
12	MR. ARBITBLIT: Object to form.	12	support, some of the progress reported
13	THE WITNESS: So I think	13	below would not have been possible,"
14	defendants have been involved in the	14	end quote.
15	change, the cultural change, in our	15	QUESTIONS BY MR. TSAI:
16	conceptualization of pain and have	16	Q. And in your view is that
17	created a climate in which doctors	17	designing and conducting the study?
	1 1 6 1, , , ! !.1	18	MR. ARBITBLIT: Object to form.
18	have been forced to treat pain with		
19	opioids, such that individuals who are	19	THE WITNESS: It's not a study
19 20	opioids, such that individuals who are on disability and get care for their	19 20	they're referring to. It's the model
19 20 21	opioids, such that individuals who are on disability and get care for their chronic pain are at increased risk to	19 20 21	they're referring to. It's the model policy rolled out by the Pain & Policy
19 20 21 22	opioids, such that individuals who are on disability and get care for their chronic pain are at increased risk to be exposed to opioids.	19 20 21 22	they're referring to. It's the model policy rolled out by the Pain & Policy Study Group, which had enormous
19 20 21 22 23	opioids, such that individuals who are on disability and get care for their chronic pain are at increased risk to be exposed to opioids.  QUESTIONS BY MR. TSAI:	19 20 21 22 23	they're referring to. It's the model policy rolled out by the Pain & Policy Study Group, which had enormous influence in the way that pain was
19 20 21 22	opioids, such that individuals who are on disability and get care for their chronic pain are at increased risk to be exposed to opioids.	19 20 21 22	they're referring to. It's the model policy rolled out by the Pain & Policy Study Group, which had enormous

	Page 194		Page 196
1	So those are the types of	1	So there was overall enormous
2	things I'm talking about.	2	pressure on doctors and on the system
3	QUESTIONS BY MR. TSAI:	3	to prescribe opioids even for minor
4	Q. What about hospital	4	and chronic pain conditions in the
5	administrators, do they have an important	5	absence of evidence because that
6	role in ordaining and mandating protocols and	6	evidence was misrepresented to all of
7	algorithms as you've referred to?	7	these various parties by the
8	A. Hospital administrators have an	8	defendants.
9	important role in that, but, again, any role	9	QUESTIONS BY MR. TSAI:
10	that they played, I believe, was as unwitting	10	Q. Have you done any analysis
11	accomplices in the deliberate	11	do you have any other basis to reliably rule
12	misrepresentation of the benefits of opioids	12	out the likelihood that there are these
13	and their risks by the defendants.	13	pressures on prescribing doctors following
14	Q. Third-party payers, health	14	protocols and algorithms that came from
15	insurance companies, they have an important	15	sources that had nothing to do with
16	role in ordaining the mandates and the	16	defendants?
17	protocols and the algorithms within the	17	MR. ARBITBLIT: Object to form.
18	industrialized medicine system that you	18	THE WITNESS: I have the lived
19	referred to?	19	experience. I got my degree in
20	A. Yes, they do.	20	medicine in the early 1990s, and I
21	Q. Okay. And when you say that,	21	lived through these, you know, past
22	you know, there's a doctor, he or she feels	22	two and a half decades, and I
23	enormous pressure to make satisfy his or	23	personally felt the pressures from
24	her patients, get them quickly out, having	24	entities like the Joint Commission in
25	industrial line, like an assembly line, who	25	order to practice in a certain way.
23	· · · · · · · · · · · · · · · · · · ·	25	
	Page 195		Page 197
1	is that pressure coming from?	1	QUESTIONS BY MR. TSAI:
2	MR. ARBITBLIT: Object to form.	2	Q. And have you done any
3	THE WITNESS: That pressure	3	quantitative analysis to tease out, let's
4	comes from the patients themselves and	4	say, the role of hospital administrators, or
5	the desire of the doctor to do a good	5	the role of third-party payers, in any
6	job, and usually people who go into	6	specific opioid prescribing decision of any
7	medicine are people who want to have	7	doctor in Cuyahoga and Summit County?
8	quality relationships with their	8	MR. ARBITBLIT: Object to form.
9	patients and feel like they help their	9	THE WITNESS: No.
10	patients. But there are also	10	QUESTIONS BY MR. TSAI:
11	institutional pressures on doctors to	11	Q. So moving on, just briefly, you
12	have good doctor/patient satisfaction	12	talked about the CME that you attended. It
13	surveys.	13	was back in 2001.
14	And there's also importantly	14	A. Yes.
15	patients' expectations around what	15	Q. So after attending that CME,
16	they expect the doctor will provide to	16	you didn't suddenly lose your independent
17	them when they see that doctor.	17	medical judgment, right?
18	And because of the defendants'	18	You still had your own
19	actions, patients came to expect that	19	independent medical judgment, you agree?
20	when they had pain, they should get an	20	A. CME courses have an enormous
21	opioid from their doctor. And we do	21	influence on the information that doctors
22	know that there are data showing that	22	acquire on which to base their medical
23	when patients' expectations are not	23	judgment.
24	met, they're more likely to rate that	24	So I didn't lose my medical
25	doctor poorly.	25	judgment, but I can only make judgment based

50 (Pages 194 to 197)

	Page 198		Page 200
1	on the information that I have and the	1	that you can based on the scientific evidence
2	misrepresentation at that CME and others like	2	that's available
3	it across the country.	3	MR. ARBITBLIT: Object to form.
4	Q. And you invoke your personal	4	QUESTIONS BY MR. TSAI:
5	experience?	5	Q at the time of prescription;
6	A. Yes.	6	do you agree with that?
7	Q. So you didn't forget all of	7	MR. ARBITBLIT: Object to form.
8	your prior medical education and training	8	THE WITNESS: As long as the
9	after leaving that how long was that	9	science is being accurately
10	session? One hour? Day long?	10	represented.
11	A. (Witness nods head.)	11	QUESTIONS BY MR. TSAI:
12	MR. ARBITBLIT: Objection.	12	Q. All right. So going back to
13	QUESTIONS BY MR. TSAI:	13	your TED Talk, if you could turn to page 5 of
14	Q. Did you forget your medical	14	that transcript?
15	education and training?	15	A. Yeah.
16	MR. ARBITBLIT: Object to form.	16	Q. So starting on page 11, you
17	THE WITNESS: Could you specify	17	say
18	what medical education and training	18	A. Page 5 or page 11?
19	you're referring to?	19	Q. Sorry, starting on page
20	QUESTIONS BY MR. TSAI:	20	line 11 of page 5, you say, "The second big
21	Q. Yeah. Your medical school,	21	invisible force driving this opioid epidemic
22	your residency, your fellowship, all of your	22	is the medicalization of poverty."
23	experience in the clinical setting, did the	23	Do you see that?
24	CME make you forget all of that?	24	A. Yes.
25	MR. ARBITBLIT: Object to form.	25	Q. Is it your opinion now that a
	Page 199		Page 201
1	THE WITNESS: I didn't forget	1	big driver of the opioid epidemic is the
2	it, but medicine is a discipline in	2	medicalization of poverty as you stated here
3	which we must keep up with the science	3	in 2017?
4	as it evolves, and a very busy	4	A. It's my opinion that the
5	clinician, including myself, does not	5	medicalization of poverty is a factor in the
6	have the time to read every single	6	opioid epidemic, but not as big a factor as
7	peer-reviewed article and dig into who	7	supply.
8	funded it or whether or not they	8	Q. Okay. And have you done any
9	accurately represented their	9	analysis to quantify the relative
10	information.	10	significance of the contributions of the
11	So we rely on continuing	11	factor of medicalization of poverty, to use
12	medical education courses in order to	12	your words, and prescription opioid supply?
13	acquire that knowledge. So when I	13	MR. ARBITBLIT: Object to form.
14	went to that continuing medical	14	THE WITNESS: I have not
15	education course, I acquired a body of	15	personally done that analysis, but
16	knowledge that was not, in fact, based	16	there are others who I cite in my
17	in the evidence, that then influenced	17	report who talk about, again, as I've
18	my practice going forward and that of	18	answered in a previous question,
1 1 0	my colleagues.	19	economic factors not being the primary
19			
20	QUESTIONS BY MR. TSAI:	20	driver, and that supply of opioids in
20 21	QUESTIONS BY MR. TSAI: Q. And to pick up on what you	21	a given region being the primary
20 21 22	QUESTIONS BY MR. TSAI: Q. And to pick up on what you said, you have to keep up science evolves,	21 22	a given region being the primary driver of opioid use disorder and
20 21 22 23	QUESTIONS BY MR. TSAI: Q. And to pick up on what you said, you have to keep up science evolves, medicine evolves.	21 22 23	a given region being the primary driver of opioid use disorder and opioid overdose in that region.
20 21 22	QUESTIONS BY MR. TSAI: Q. And to pick up on what you said, you have to keep up science evolves,	21 22	a given region being the primary driver of opioid use disorder and

1 2	Page 242		Page 244
2	the record. I would like to take a	1	I spoke with validated that the
	quick break. Thanks.	2	misrepresentations laid out here in
3	VIDEOGRAPHER: We're going off	3	this section under Mallinckrodt were
4	the record, and the time is 1:37 p.m.	4	misrepresentations that they had been
5	(Off the record at 1:37 p.m.)	5	the recipients of in their medical
6	VIDEOGRAPHER: We are now going	6	training and that had led them to
7	back on the record, and the time is	7	prescribe opioids in a way that they
8	1:56 p.m.	8	now realize was not evidence based.
9	(Lembke Exhibit 13 marked for	9	QUESTIONS BY MR. TSAI:
10	identification.)	10	Q. Did anyone use the word
11	QUESTIONS BY MR. TSAI:	11	"Mallinckrodt"?
12	Q. So the next exhibit is	12	
13	Appendix I to your report, and it has five	13	
14	sections. Section B relates to Mallinckrodt.	13	Q. Did anyone use the word any
			of the products that are that Mallinckrodt
15	Can you turn to that?	15	made specifically?
16	A. Sure.	16	A. Not that I recall.
17	Q. So, first of all, have you	17	Q. Okay. Have you done any
18	reviewed any information that you can point	18	analysis to determine whether or to what
19	to or have any other basis to say that any of	19	extent Mallinckrodt's marketing of opioid
20	the statements that you attribute to	20	products, specifically Mallinckrodt,
21	Mallinckrodt in Appendix I.B of your report	21	influenced prescribing decisions or rates in
22	were actually seen by any specific doctor or	22	Cuyahoga and Summit Counties?
23	other person in Cuyahoga and Summit Counties?	23	MR. ARBITBLIT: Object to form.
24	A. I don't have specific examples,	24	THE WITNESS: Mallinckrodt held
25	but I do believe these misrepresentations	25	the Train-the-Trainer events which
	Page 243		Page 245
1	were widely disseminated, including in Summit	1	the state of the s
2			communicated these misrepresentations
	and Cuyahoga Counties.	2	communicated these misrepresentations to individuals who then went
3	and Cuyahoga Counties.  Q. So are you speculating that	l .	to individuals who then went
	Q. So are you speculating that	2	to individuals who then went throughout the country disseminating
3 4	Q. So are you speculating that they would be seen by doctors in Cuyahoga and	2 3 4	to individuals who then went throughout the country disseminating these misrepresentations, and I don't
3 4 5	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any	2 3 4 5	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I
3 4 5 6	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair	2 3 4 5 6	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they
3 4 5 6 7	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair to say?	2 3 4 5 6 7	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they disseminated these misrepresentations
3 4 5 6 7 8	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair to say?  MR. ARBITBLIT: Object to form.	2 3 4 5 6 7 8	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they disseminated these misrepresentations also in Summit and Cuyahoga Counties.
3 4 5 6 7 8 9	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair to say?  MR. ARBITBLIT: Object to form.  THE WITNESS: Because these	2 3 4 5 6 7 8	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they disseminated these misrepresentations also in Summit and Cuyahoga Counties.  Also Mallinckrodt promoted a
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3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair to say?  MR. ARBITBLIT: Object to form.  THE WITNESS: Because these misrepresentations were so deeply interwoven into medical education, it would be hard for me to believe that physicians in Summit and Cuyahoga Counties hadn't seen these misrepresentations, but I cannot point to any specific examples.  QUESTIONS BY MR. TSAI:  Q. And when you talked to doctors after your pair of talks last year in Ohio, did any of those doctors who practice in Cuyahoga and Summit Counties tell you that they relied on any of the statements that you attribute to Mallinckrodt specifically?	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they disseminated these misrepresentations also in Summit and Cuyahoga Counties.  Also Mallinckrodt promoted a book through the CARES Alliance called Defeat Chronic Pain Now!, and I wouldn't be surprised if that book was read by providers in Cuyahoga and Summit County and that book contained these misrepresentations.  QUESTIONS BY MR. TSAI:  Q. So you say you wouldn't be surprised, but can you point to anything in your materials that you've provided to us that specifically isolates the contribution of Mallinckrodt's conduct to promotional activity with respect to opioid prescribing or any adverse event in Cuyahoga and Summit
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair to say?  MR. ARBITBLIT: Object to form.  THE WITNESS: Because these misrepresentations were so deeply interwoven into medical education, it would be hard for me to believe that physicians in Summit and Cuyahoga Counties hadn't seen these misrepresentations, but I cannot point to any specific examples.  QUESTIONS BY MR. TSAI:  Q. And when you talked to doctors after your pair of talks last year in Ohio, did any of those doctors who practice in Cuyahoga and Summit Counties tell you that they relied on any of the statements that you	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they disseminated these misrepresentations also in Summit and Cuyahoga Counties.  Also Mallinckrodt promoted a book through the CARES Alliance called Defeat Chronic Pain Now!, and I wouldn't be surprised if that book was read by providers in Cuyahoga and Summit County and that book contained these misrepresentations.  QUESTIONS BY MR. TSAI:  Q. So you say you wouldn't be surprised, but can you point to anything in your materials that you've provided to us that specifically isolates the contribution of Mallinckrodt's conduct to promotional activity with respect to opioid prescribing